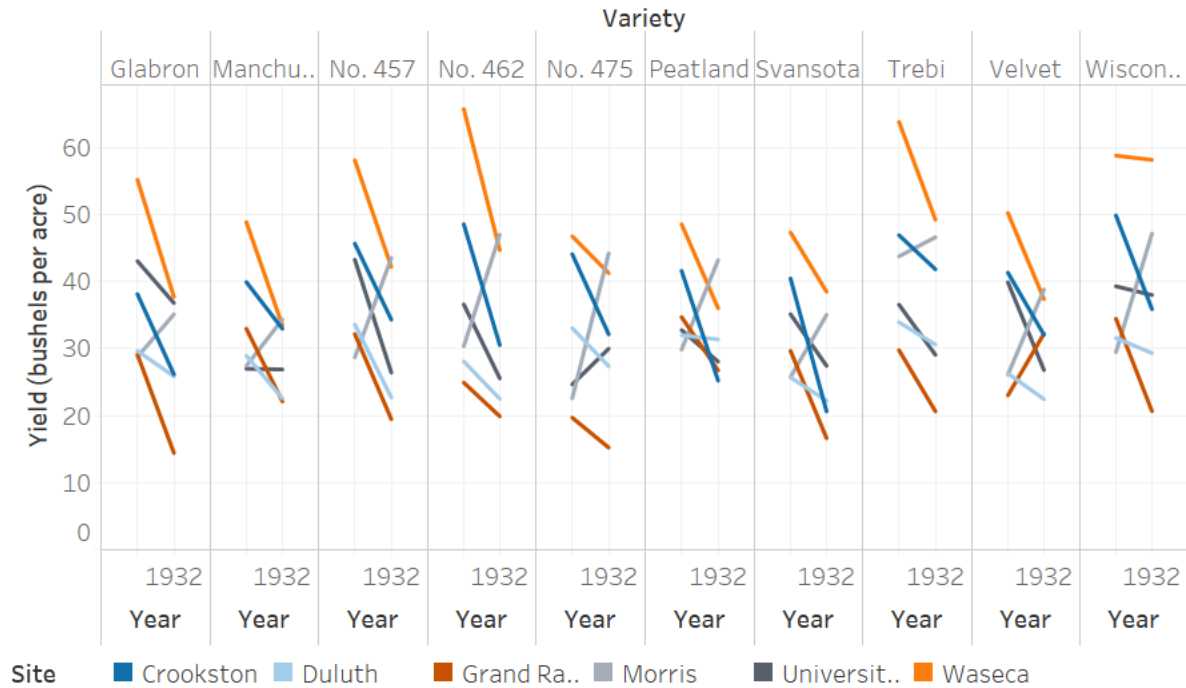


MN Barley Yield Change from 1931 to 1932



This data set is designed to show how the amount of various barley types has changed in different places throughout Minnesota. I used Tableau to create this visualization mostly because I am familiar with it and it makes creating vizzes simpler. One thing about this dataset is that it only provides yield data from 2 years, so putting the data in context is difficult. Still, I wanted to be able to easily compare one type across multiple locations, or multiple types at 1 location.

I chose to graph the yield on the y-axis because that is the dependent variable that we care most about – how much barley there was. Along the x-axis is year, from 1931 to 1932 because that is the independent variable which we naturally associate with the x-axis. Horizontally, I stacked mini-graphs of each type of variety. I separated these as such because each type was measured separately and has its own trend. I also wanted to make it easy to compare locations, so for each variety I stacked individual lines color-coded for the location. I could have had separate graphs for location and color coded the type, but I did it this way because there were more varieties than locations. It is easier to see more graphs spread out horizontally than it is to decipher multiple colored lines stacked on top of one another. I used Tableau’s “color-blind” palette of colors to choose colors that would be easy to see for the average viewer and still be distinguishable for someone who was colorblind. I also included a legend at the bottom to map the color to the specific location. This way, it is easier to see that Waseca has a higher average yield than most other locations across all the varieties, and that there was an overall decrease in yield from 1931 to 1932.

I left the bottom x-axis with repeated “Year” labels to emphasize that the seemingly large graph is 10 smaller graphs sharing the same y-axis. I used lines to mark the data to keep the area from getting too cramped. It is also easier to see where lines cross and whether they’re going in the same general

direction or not (e.g., the gray lines representing yield from Morris cross the other lines because they aren't going in the same downward direction). Some things are harder to edit in Tableau, so I didn't include 1931 in the x-axis because it was hard to add in Tableau without having to change the sizing of the graph or making the bottom part too cramped. I mention "from 1931 to 1932" in the title to make up for the missing year in the axis label. I also wasn't easily able to expand the variety name or location name space to display the full length of all the names, so I left it with the "..." assuming someone looking at the graph would already know or have access to the full names. I made the image the standard laptop browser size and Tableau automatically sized/spaced the fonts. Labels seemed readable so I didn't edit, trusting that Tableau uses appropriate sizing.